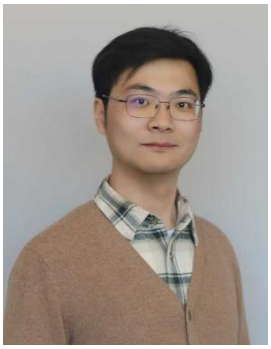

Bo YU

Ph. D Candidate, Zhejiang University, China
Visiting Researcher, University of Bayreuth, Germany
E-mail: yu_nami@outlook.com
Linkedin
www.linkedin.com/in/bo-yu-zju

Education

09/2020-Present **Ph.D candidate**, Polymer Materials, Zhejiang University (expected 03/2026)
09/2016-08/2020 **Bachelor**, Polymer Materials and Engineering, Zhejiang University

Research & Work Experience

03/2025-Present **Visiting Researcher | Antimicrobial materials,** University of Bayreuth, Bayreuth, DE
- Develop polypeptide-based materials for antimicrobial applications, including synthesis, structural characterization, and biological evaluation in collaboration with biologists.
- Investigate structure–property relationships to enhance antibacterial efficiency and biocompatibility.

09/2020-Present **Ph. D Researcher | Theranostic nanomedicines,** Zhejiang University, Hangzhou, CN
- Design, synthesize, and characterize macromolecular nanomedicines for theranostic applications based on antioxidants and fluorescent probes.
- Evaluate therapeutic efficacy on mammalian cell lines and murine models related to kidney injury and tumor therapy.
- Maintain analytical instruments, establish/optimize standard operating procedures
- Contributed to 13 publications and 2 patent applications on novel drug delivery systems.

07/2022-08/2022 **Research Assistant | Structural analysis,** Zylox-Tonbridge Medical Co., Ltd, Hangzhou, CN
- Evaluated crystallization degree of drug coatings on interventional medical devices via XRD.
- Prepared test reports.

09/2019-08/2020 **Undergraduate Researcher | Anti-tumor nanomedicines,** Zhejiang University, Hangzhou, CN
- Synthesized and characterized anti-tumor nanomedicines for synergistic therapy.

07/2019-08/2019 **Visiting Researcher | Polymer Synthesis,** University of Bayreuth, Bayreuth, DE
- Conducted copolymerization of trans-limonene epoxide and CO_2 to explore sustainable polymer synthesis.

11/2017-06/2019 **Research Assistant | Polymer Synthesis,** Zhejiang University, Hangzhou, CN
- Performed air-sensitive polymerizations using Schlenk techniques.

Highlights

- Multidisciplinary background bridging synthetic chemistry, material science and biology, with experience in both chem and bio labs: spanning molecular design, formulation development, and therapeutic validation.
- International research experience across China and Germany, demonstrating strong adaptability, communication skills, and the ability to thrive in diverse scientific environments.

Skills

- **Organic & Polymer synthesis:**
  Controlled polymerization and functional biomaterial design for drug delivery
- **Formulation & Analytical Characterization:**
  Formulation development, nanocarrier fabrication, comprehensive characterization (NMR, LC-MS, GPC, DLS, TEM, UV-vis, Fluorescence spectroscopy)
- **Biological Evaluation & Preclinical Models:**
  Cell-based assays (toxicity, viability, immunostaining), murine and porcine models for tumor and nephrotoxicity studies
- **Scientific Communication & Documentation:**
  Patents, reports, peer-reviewed publications, cross-functional collaboration

Languages

Chinese (Native)
English (Fluent)
German (Learning)